

CLAIMS:

1. A method of recording marks representing data in an information layer of a record carrier by irradiating the information layer by means of a pulsed radiation beam, each mark being written by a sequence of pulses, the recorded marks being erasable by irradiating the information layer with an erase radiation beam,
5 characterized in that said erase radiation beam has a first erase power level for a first erase period, a second erase power level higher than or equal to said first erase power level for a second erase period, and a third erase power level lower than said second erase power level for a third erase period.
- 10 2. A method as claimed in claim 1,
wherein said third erase power level is lower than said first erase power level.
3. A method as claimed in claim 1,
wherein said first erase power level and said third erase power level are substantially equal
15 and lower than said second erase power level.
4. A method as claimed in claim 1,
wherein said second erase power level is lower than the write power level (w) of said pulses
of said pulsed radiation beam for recording marks.
20
5. A method as claimed in claim 1,
wherein said third erase power level is higher than the bias power level (b) between said
pulses of said pulsed radiation beam for recording marks.
- 25 6. A method as claimed in claim 1,
wherein said first erase period and said second erase period are shorter than said third erase
period.
7. A method as claimed in claim 1,

wherein the sum of said first erase period and said second erase period is shorter than half the shortest mark being recorded.

8. A method as claimed in claim 1,

5 wherein said information layer has a phase which is reversibly changeable between a crystal phase and an amorphous phase.

9. A method as claimed in claim 1,

wherein said record carrier comprises at least two information layers.

10

10. A method as claimed in claim 9,

wherein at least one of said at least two information layers is an at least partially transparent layer.

15

11. A recording device for recording marks representing data in an information layer of a record carrier by irradiating the information layer by means of a pulsed radiation beam, the device comprising a radiation source providing said radiation beam and a control unit for controlling the power of said radiation beam, such that each mark is written by a sequence of pulses and the recorded marks are erasable by irradiating the information layer with an erase radiation beam,

20

characterized in that a control unit is operative for controlling said radiation beam such that said erase radiation beam has a first erase power level for a first erase period a second erase power level higher than or equal to said first erase power level for a second erase period, and a third erase power level lower than said second erase power level for a third erase period.

25

12. A recording device as claimed in claim 11,

wherein said control unit is operative for controlling said radiation beam such that the third erase power level is lower than the first erase power level.

30

13. A recording device as claimed in claim 11,

wherein said control unit is operative for controlling said radiation beam such that the first erase power level and the third erase power level are substantially equal and lower than the second erase power level.